Chapter

Psychological Factors as Predictor of Sport Participation among Japanese and Foreign Students in Sendai, Japan

Akindele Abimibayo Adeoya, Adewale Olugbemiga Adeleye and Shinichi Egawa

Abstract

Sports play a functional role in human development. Regular sport participation has beneficial effects on physical, psychological and social wellbeing. It has positive effects on prevention and treatment of non-communicable diseases, physical appearance, enhance self-concept and external prestige, lower rates of suicidal ideation, reduce use of fossil fuels, and substantially increase life expectancy. The advent and excessive use of technology, academic workload coupled with the incidence of COVID-19, students become content with engaging more in sedentary activities. This chapter examined the psychological factors predicting sport participation among Japanese and foreign students in Sendai, Japan. The common choice of recreational sports are sedentary activities with a high level of performance in terms of frequency, intensity, duration and long period of participation. Psychological factors of self-confidence, value, task familiarity, perceived success significantly predicts sport participation among university students. Therefore, there is need for increased awareness on benefit of sport participation within the university. Improved reconciliation between academic and physical education programs, and development of attractive recreational sports considering the psychological process that leads to participation. To allay concerns during pandemic, self-organized, non-contact and outdoor sports should be encouraged with adequate preventive measures in place.

Keywords: Psychological factors, Physical activity, Sedentary activities, University students, Sport participation

1. Introduction

Regular physical activity, especially sport is proven to help prevent and treat non-communicable diseases such as heart disease, stroke, diabetes and breast and colon cancer. It also helps to prevent hypertension, overweight and obesity, improve mental health, quality of life and well-being [1, 2] and substantially increase life expectancy [3]. Participation in regular physical activity such as recreational sport has positive effects on both physical (appearance, slimness, conditioned body)

and psychological health and well-being (self-esteem, anxiety, depression, vitality, energy) [4, 5], enhanced self-concept [6], lower rates of suicidal ideation including both thoughts and intentions [7]. Leisure is psychological and social utilities that make it a significant influence to the quality of people's lives, which connote how good, fulfilled, cheerful and comfortable they feel [8]. It has developed an increasingly anticipated and significant component of people's lives in modern societies [8]. In addition to the multiple health benefits of physical activity, societies that are more active can generate additional returns on investment including a reduced use of fossil fuels, cleaner air and less congested safer roads [1].

Sport is a group of physical exercises that may be classified into individual or team games with specific rules [9, 10]. It is recreational in nature because it enables people to take part when they like and for entertainment for both the participants and spectators watching such performance. Sport is organized or unorganized recreation [10]. Sport develops individual physical fitness and health/wellbeing, aid mental growth, facilitates internal unity and boosts external prestige. Sports helps the participants stay in shape, improve endurance, boost self-esteem, provide guidance and aid weight control, organize their time, boost friendships, teamwork and build relationships with their peers and adults. Sports generally offers healthy decisions such as avoiding smoking or drinking and offer hidden health benefits such as lower chance of getting osteoporosis or breast cancer later in life [10, 11].

World Health Organization (WHO) recommended that in order to improve cardiorespiratory and muscular fitness, bone health, reduce the risk of non-communicable diseases and depression: adults aged 18–64 should do at least 150 minutes of moderate-intensity aerobic physical activity throughout the week or do at least 75 minutes of vigorous-intensity aerobic physical activity throughout the week or an equivalent combination of moderate and vigorous-intensity activity; aerobic activity should be performed in bouts of at least 10 minutes duration; for additional health benefits, adults should increase their moderate-intensity aerobic physical activity to 300 minutes per week, or engage in 150 minutes of vigorous-intensity aerobic physical activity per week, or an equivalent combination of moderate and vigorous-intensity activity; muscle-strengthening activities should be done involving major muscle groups on 2 or more days a week [2].

It has been observed that there is an increasing decline in sport participation especially with the advent and excessive use of technology, academic workload coupled with the incidence of COVID-19, students become content with engaging more in sedentary leisure activities such as gaming, social network chatting, watching television and even sleeping. Worldwide, 1 in 4 adults, and 3 in 4 adolescents do not currently meet the global recommendations for physical activity [1]. Empirical evidence revealed that sports participation decreases as age increases [12]. In addition, both males and females' sports participation declines as they move into adult life [13]. In Japan, large proportion of adults do not participate in regular leisure-time physical activity [14]. The National Health and Nutrition Surveys in Japan for 1997, 2004, and 2009 revealed that 70–80% of the working generation (aged 20–59 years) were not sufficiently active (i.e., were exercising less than 30 min twice a week) [15].

Usually, universities annually allocate funds for the development and/or maintenance of sport facilities to fulfill students' needs and encourage sport participation of the university community. Particularly, in Japan universities, there are active and viable sport clubs however, participation in such clubs required high level of commitments, hard work, obedience, tolerance and selfless devotion. Student life of participants revolves primarily around membership, which indirectly discourages students who intend to participate solely for recreational purpose.

Sports clubs in Japan universities are military in nature because of the strict rules of the club. For example, new club recruits are required to do jobs such as cleaning, maintenance of sport equipment and facilities before and after practice sessions/day [16]. For foreign students in a relatively conservative city like Sendai, who readily have language barrier to contend with, adjusting to these customs could be challenging and discourage sport participation. More also, students without club engagement tend to engage or prefer to engage in part-time job prioritizing economic reason(s) of such engagement to health benefits inherent in sport participation. Comparatively, there are also limited studies on psychological factors predicting sport participation among university students. It is on this premise this study aims to investigate psychological factors as predictor of sport participation among Japanese and foreign students in Sendai, Japan.

2. Review of related literature

Sport participation has been shown to be associated with many psychological and social benefits, beyond that derived from physical activity, including improvements to self-control and emotional regulation [6]. These distinct benefits are perhaps due to unique characteristics of sport participation, compared with other forms of physical activity [17]. Variables such as gender, age, time available to participate and motivational factors such as fun, slimness, fitness and competition have shown to increase participation [18]. Sport participation was positively related to self-assessments of physical appearance and physical competence, physical self-esteem and general self-esteem [19]. Athletes whose behavior suggested stronger psychological connections to sport engaged more in terms of frequency, depth and breadth of sport-related behaviors [20]. Organized sports activities may somewhat contribute to healthy body mass index (BMI) and while healthy BMI can lead to increased participation in organized sports, it is also possible that increased participation in physical activity can lead to healthy BMI [21]. However, all forms of physical activity can provide health benefits if undertaken regularly and is of sufficient duration and intensity [1].

Self-confidence is one of the most related variables to sport performance [22]. It has also been shown to influence behaviors, attitudes, and sporting attainment [23]. Self-confidence is simply defined to be a self-perceived measure of one's belief in one's own abilities which is dependent upon contextual background and setting [24]. It is one's belief in his courage, power and ability to take action using his own abilities as a source for his values and purposes. Self-confidence was also conceptualized as self-efficacy. Self-confidence involves people's belief to control themselves and their environment; a perceived ability that provides the possibility that athletes use their emotion appropriately to achieve sports aim [25]. Self-confidence is important in sportive performances as it affects performance positively especially in good feelings, behaviors, fast planning in competitions, undoubtedly giving the right decision in performance increase and in continuation of the competition [26]. Self-efficacy or confidence affects the choice of activities, effort expenditure, persistence in a given activity, and vulnerability to stress and depression [25].

Sport confidence influences performance through its effect on how athletes think about, feel about, and respond to everything that happens to them in sport [27]. Self-confidence is a judgment of one's ability to perform at a certain level, whereas perceived success pertains to one's judgment of the likely consequences of such a performance and or expected performance attainments [27]. This requires a detailed assessment of the level, strength, and generality of perceived self-confidence. Individuals who perceive themselves to be competent in sports

should be more likely to participate, while those low in perceived physical competence should be more likely not to participate or to discontinue participation [28]. Challenges to identity such as having to show others an unfit body, lacking confidence and competence in core skills or appearing overly masculine were barriers to participation [29].

Young athletes who perceive themselves to be highly competent in a sport, who are oriented toward mastery in sport, and who identify themselves as primarily responsible for their performance persist longer at the sport and maintain interest in mastering the skills. In contrast, those who perceive themselves to have low competence in sport, who are oriented toward extrinsic mastery, and who believe that others are responsible for their performance do not maintain task performance and interest [28]. Physical benefits, weight control, independence and social, mental and emotional benefits as the main internal motivators [30]. Self-perception is incredibly important in motivating people to participate in all types of sport and physical activity [29]. The relationship between self-confidence and performance is likely to be somewhat different depending on the performer's perception of the level of self-confidence he/she needs in order to perform the task successfully [31].

The influence that performance experiences/familiarity have on perceived success depends on the perceived difficulty of the task, the effort expended, the amount of physical guidance received, and the temporal patterns of success and failure. Task familiarity can also be obtained through observing or imagining others engaging in a task that observers themselves have never performed. Their influence on self-efficacy can be enhanced by a number of factors. Variables such as previous performance, affective self-evaluation, goal setting, and physiological states (mood or fitness) may exert a direct influence on sport performance [32]. Specifically, past experience plays a vital role with regard to participation in sport at university level [33].

Values are principles or standards considered worthwhile or desirable. They help people select and evaluate behavior, define goals, and set standards for acceptable behavior [34]. Personal values represent criteria by which people choose and assess subsequent actions, and apply to individual decision-making in virtually all compartments of our lives. Although research in mainstream psychology has attended to the concept of personal values and the role values play in resulting behaviors for over half a century, the lack of attention devoted to values and sport participation is surprising [35]. There is need to understand values associated with sport participation [34]. This is essential because variety of social, cultural and biological factors influence men and women's decision to participate in sports [12]. For example, there is a negative impact of migration background on all sport participation [36]. Consequently, with such findings, one can possibly assume that culture, national traditions and values not only play a vital role on sports participation within a country but also when comparisons are made between different countries [12].

3. Methodology

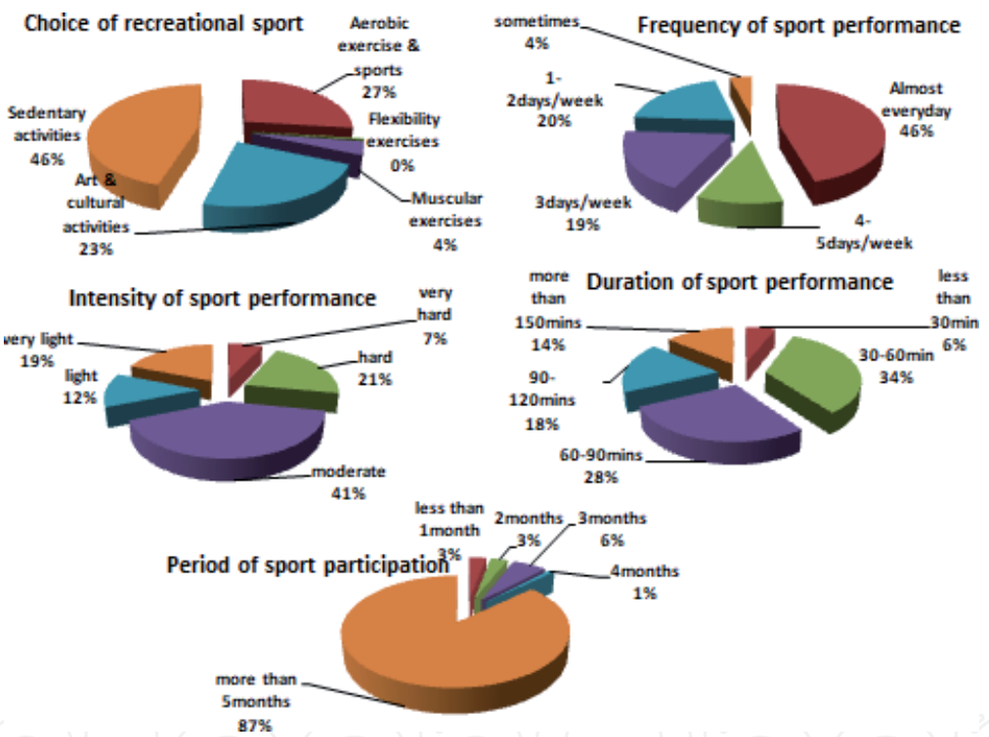
The descriptive research design was used in this study. The study population comprises of all students of tertiary institutions in Sendai. The sample for this study was two hundred and thirty-six (236) Japanese and foreign university students. Convenience sampling technique was used to select 44 foreign students who participated in the Tohoku University Foreign Student Association (TUFSA) soccer competitions prior to the declaration of state of emergency while a simple random sampling technique was used to select 192 Japanese students in Miyagi University of Education (MUE). The instrument for this study was a self-developed and modified

questionnaire structured in line with the variables of this study and translated both in English and Japanese languages. For sport participation, Min-Haeng Cho five-item physical activity questionnaire was adapted [37]. Each item has a 5-point Likert-scale. While psychological factors are self-developed items which include four subscale of self-confidence, perceived success, task familiarity and values were in a 4-point likert-scale format. Data was analyzed using descriptive statistics of frequency counts, percentages and pie charts.

4. Data presentation, analysis and discussion of findings

This part presents, analyzes and discusses findings on the psychological factors as predictor of sport participation among Japanese and foreign students in Sendai.

4.1 Sport participation of respondents



The results from the pie chart above showed 46% of the respondents engaged in sedentary activities such as sport spectator, watching movies and television, 27% engaged in aerobic exercises and sports (running, cycling, swimming, jogging aerobics and ball games), 23% engaged in arts and cultural activities (reading, writing, playing cards, dance and music, painting), 4% in muscular exercise (weight training and lifting) and 0.4% engage in flexibility exercises (stretching, yoga, pilates, calisthenics). Chart on frequency of sport participation revealed 46% participated in their choice of sport almost every day, while 20% 1–2 days/week, 19% 3 days/week, 11% 4-5 days/week and 4% sometimes. On intensity of sport performance, 41% reported moderate, 21% hard, 19%very light, 12% light and 7% very hard. Duration of sport performance by respondents range from 30 to 60 minutes at 34%, 60-90 minutes 28%, 90-120 minutes 18%, more than 150 minutes 14% and less than 30 minutes 6%. Period of sport participation by respondents revealed 87% have been performing the activity for more than 5 months, while 6% for 3 months, 3% for 2 months and less than 1 month, and 1% 4 months. This result indicates that the common choice of recreational sport participation among respondents

is sedentary activities with a high level of performance in terms of frequency, intensity and duration, and long period of participation. This finding is consistent several studies that revealed decreased sport participation and increase in sedentary activities among adults including university students [1, 12, 13].

4.2 Psychological predictors of sport participation

The results from **Table 1** above showed that 70% of the total respondents agree that self-confidence in choice of sport predicts participation while 30% disagree. Out of this, 58.5% Miyagi University of Education students agree and 41.5% disagree; and 81% of foreign students agree and 19% disagree. This implies that self-confidence significantly predicts sport participation among respondents especially among foreign students. This agrees with similar studies [25, 27, 38, 39]. For example, a study reported that self-confidence differs from athlete to athlete and event to event and that past experience, mastery in skills and the social support increases the self confidence in sports man [38]. Self-confidence plays a significant role in the success of athletes a such mental training and practicing programs should be included along with physical and skills practices on the agenda of sport coaches to create the degree of self-confidence necessary for peak performance [39].

Table 2 revealed that 47% of total respondents agree that perceived success predicts sport participation while 53% disagree. Out of this, 32.5%, 67.5% of Miyagi University of Education students and 61.4%, 38.6% of foreign students agree and disagree respectively. The result indicates that while perceived success does not significantly predict sport participation among Japanese students, it significantly predicts sport participation among foreign students. Performance is likely to be somewhat different depending on the performer's perception of the level of self-confidence he/she needs in order to perform the task successfully [31].

Table 3 showed that 74.5% of the total respondents agree that task familiarity predicts sport participation while 25.5% disagree. Out of this, 63.7% Miyagi University of Education students agree and 36.3% disagree; and 85% of foreign students agree and 15% disagree. This revealed that task familiarity significantly predicts sport participation among respondents. This result concurred other findings that the past experience plays a vital role in sport participation even in the university [33, 38].

Table 4 showed that 72% of the total respondents agree that value predicts sport participation while 28% disagree. Out of this, 71% Miyagi University of Education students agree and 29% disagree; and 73% of foreign students agree and 27% disagree. This implies that psychological factor of value significantly predicts

Self-confidence	Agree		Disagree		100%
	70%	MUE 58.5%	30%	MUE 41.5%	
		FS 81%		FS 19%	

Table 1.
Self-confidence and sport participation among Japanese and foreign students.

Perceived Success	Agree		Disagree		100%
	47%	MUE 32.5%	53%	MUE 67.5%	
		FS 61.4%		FS 38.6%	

Table 2.
Perceived success and sport participation among Japanese and foreign students.

Task Familiarity	Agree		Disagree		100%
	74.5%	MUE 63.7%	25.5%	MUE 36.3%	
		FS 85%		FS 15%	

Table 3.
Task familiarity and sport participation among Japanese and foreign students.

Value	Agree		Disagree		100%
	72%	MUE 71%	28%	MUE 29%	
		FS 73%		FS 27%	

Table 4.
Value and sport participation among Japanese and foreign students.

sport participation among respondents. Similar study also emphasized the need to understand values associated with sport participation [34].

The observed difference particularly in the psychological factors of self-confidence, perceived success and task familiarity and sport participation between Japanese and foreign students could be indicative that foreign students are more conscious and anxious of others perception or judgment of their sporting skills/ability due to variations in socio-cultural backgrounds.

5. Discussion

Studies have shown psychological indices including perceived competence, self-efficacy, attitude, enjoyment, body image, self-esteem, beliefs influence students sport participation [40–42]. Thomas et al. [43] highlighted three barriers including intrapersonal (stress and perceived self-skill), interpersonal (lack of friends and peer influence), and structural (homework, class schedule, and overcrowded facilities) barriers to sport engagement among Canadian university students. Beliefs i.e. enjoyable, time consuming, friends, and family members predicted intention and behavior in sport participation [44]. Lack of confidence in performing a skill, low perceived competent and the need to feel worthy leads to withdrawal in sport [45]. Determination of the motivations that are active in sport participation increase individual participation [46]. In a survey of 1350 university students in southwestern Nigeria [47] identified the positive effects of love for sport, famous athletes as role model and family support in sport participation and stressed the need to adopt tangible and intangible motivating measures to encourage continuous participation. Time is a major reason why students do not involve in sports [48, 49]. Because student lifestyles including balancing academic life with paid work, volunteering and social activities all compete with sport participation [50]. However, [51] opined that lack of willpower could be the main reason behind lack of time. A study of college and university students sport participation in China revealed that individual preferences and economic factors influence participation [52]. Multivariate analysis revealed that the number of hours in student part-time work has a strong negative effect on sport participation [53]. Kerry [49] established that that increase in tuition fee had an impact on sports participation and consequently suggested that universities should device a means to address cost and time. In addition, ethnicity, gender, as well as religiosity, should be taken into consideration when offering sport programmes [54]. A three-year national survey report in England revealed that Black and Asian students are less likely to participate in sport [55]. Values, task

familiarity, perceived success and self-confidence are majorly reflective of barriers and concerns predicting sport participation among students. Peer encouragement could help check and overcome these concerns [50].

6. Conclusion

Based on the findings, it is concluded that psychological factors of self-confidence, perceived success, task familiarity and value significantly predict sport participation among Japanese and foreign students in Sendai. More also, there is a low level of sport participation among Japanese and foreign students in Sendai. Therefore, it is recommended that stakeholders in sports and health within the university such as physical and health, and medical science departments and university health center should collaborate more effectively for advocacy to increase awareness on benefit of sport participation and development of attractive recreational sports considering the psychological process that leads to participation. There should also be an improved reconciliation between academic and physical education programs. To allay concerns during pandemic, non-contact and outdoor sports should be encouraged with adequate preventive measures in place.

Acknowledgements

Utmost appreciation to almighty God. Our profound gratitude goes to Associate Professor Kurokawa Naoyuki of the Department of Health and Physical Education, Miyagi university of Education. All the foreign and Japanese students who participated in this research, your cooperation and understanding is immensely appreciated. Also we appreciate the Japanese government through the Ministry of Education, Culture, Sport, Science and Technology (MEXT), Miyagi University of Education and Tohoku University for providing both a welcoming and conducive study environment. Thank you all.

Conflict of interest

The authors declare no conflict of interest.

Author details

Akindele Abimibayo Adeoya[1*], Adewale Olugbemiga Adeleye[2] and Shinichi Egawa[1]

1 International Cooperation for Disaster Medicine Laboratory, International Research Institute of Disaster Science (IRIDeS), Tohoku University, Sendai, Miyagi, Japan

2 Department of Human Kinetics and Health Education Olabisi Onabanjo University, Ago-Iwoye, Ogun State, Nigeria

*Address all correspondence to: adeoya4real@yahoo.com

References

[1] WHO Global action plan on physical activity 2018-2030: more active people for a healthier world. Geneva; 2018. https://apps.who.int/iris/bitstream/handle/10665/272722/9789241514187-eng.pdf [Accessed June 10, 2021]

[2] WHO Guidelines on Physical Activity and Sedentary Behaviour. 2020. 9789240015128-eng.pdf [Accessed June 10, 2021]

[3] Wen CP, Wai JP, Tsai MK, Yang YC, Cheng TY, Lee MC, Chan HT, Tsao CK, Tsai SP, Wu X. Minimum amount of physical activity for reduced mortality and extended life expectancy: a prospective cohort study. Lancet. 2011 Oct 1;378(9798):1244-53. doi: 10.1016/S0140-6736(11)60749-6.

[4] Jowett, S. and Felton, L.The role of psychological factors in recreational sport participation. Sport Coach, United Kingdom; 2013.

[5] Khan, K.M., Thompson, A.M., Blair, S.N., Sallis, J.F., Powell, K.E., Bull, F.C., Bauman, A.E. Sport and Exercise as Contributors to the Health of Nations. Lancet. 2012. 380(9836): 59-64. Doi: https://doi.org/10.1016/S0140-6736(12)60865-4.

[6] Eime, R.M., Young, J.A., Harvey, J.T, Charity, M.J, and Payne, W.R. A systematic review of the psychological and social benefits of participation in sport for children and adolescents: informing development of a conceptual model of health through sport. The International Journal of Behavioral Nutrition and Physical Activity; 2013. pg10:98 doi: 10.1186/1479-5868-10-98

[7] Taliaferro L.A., Eisenberg, M.E., Johnson, K.E., Nelson, T.F., and Neumark-Sztainer, D. Sport participation during adolescence and suicide ideation and attempts. *Int J Adolesc Med Health*. 2011; 23 (1): 3-10.

[8] Adeleye, A.O., Okundare, A.A., Olawunmi, S. A., and Fadoju A.O.Psycho-Demographic factors as correlates of recreational sports participation among teaching service commission staff of selected secondary schools in Ijebu-Igbo Ogun State. Potchesfstroom *Journal of Education and Social Science*. 2018; vol.9 pg 269-283.

[9] Mbaye, K. Sports and human rights. Olympic review XXVI (24). Loy, J. W. (1968). The nature of sport: A definitional effort. 1999; Quest Monograph, 10, 1-15

[10] Olanipekun, J.O. and Akindutire, I. O. Benefits of Participation in Sport to the Youth. *IOSR Journal of Sport and Education*, 2017; Vol. 4 (1): 30-34. DOI:10.9790/6737-0401013034

[11] Babalola, J. F. Handbook of practical physical education. Ibadan; 2010. O.B.F. International Press.

[12] Grima, S., Grima, A., Thalassinos, E., Seychell, S. and Spiteri J. Theoretical Models for Sport Participation: Literature Review. International Journal of Economics and Business Administration. 2017; Vol. 5 (3): 94 – 116. https://www.ijeba.com/dmdocuments/2017/2017_V_3_8.pdf [Accessed June 10, 2021]

[13] Lim, S.Y., Warner, S., Dixon, M., Berg, B., Kim, C., and Newhouse-Bailey, M. Sport Participation Across National Contexts: A Multilevel Investigation of Individual and Systemic Influences on Adult Sport Participation. European Sport Management Quarterly, 2011; 11(3), 197-224. DOI:10.1080/16184742.2011.579993

[14] Itoh, H., Kitamura, F., Hagi, N. et al. Leisure-time physical activity in youth as a predictor of adult leisure physical activity among Japanese workers: a

cross-sectional study. Environ Health Prev Med 2017;22, 37. https://doi.org/10.1186/s12199-017-0648-1

[15] Miyachi M. Measures of physical activity and exercise for health promotion by the Ministry of Health, Labour and Welfare. *J Phys Fitness Sports Med*. 2012; 1:467-72. doi:10.7600/jpfsm.1.467.

[16] Yamamoto, Y. Japanese University Athletes Dilemma: Study, Spot Performance or both. The IAFOR Journal of Edu. 2016; Vol. 4:1 pg146-168. https://doi.org/10.22492/ije.4.1.08

[17] Watson, A., Timperio, A., Brown, H., Hinkley, T. and Hesketh, K.D. Associations between organised sport participation and classroom behaviour outcomes among primary school-aged children. 2019. https://doi.org/10.1371/journal.pone.0209354

[18] Lera-López, F., and Rapún-Gárate, M. Determinants of sports participation and attendance: differences and similarities. *International Journal of Sports Marketing & Sponsorship*, 2011;12(2), 167-190. DOI:10.1108/IJSMS-12-02-2011-B007

[19] Bowker, A. The relationship between sports participation and self-esteem during early adoelscence. *Can J Behav Sci*. 2006;38 (3): 214-229. DOI:10.1037/cjbs2006009

[20] Beaton, A.A., Funk, D.C. and Alexandris, K. Operationalizing a Theory of Participation in Physically Active Leisure. *Journal of Leisure Research*. 2009; 41(2), 177203. https://www.nrpa.org/globalassets/journals/jlr/2009/volume-41/jlr-volume-41-number-2-pp-177-203.pdf [Accessed June 10, 2021]

[21] Cairney, J. and Veldhuizen, S. Organized sport and physical activity participation and body mass index in children and youth: A longitudinal study. *Prev. Med. Rep.* 2017; vol. 6, 336-338. DOI:10.1016/j.pmedr.2017.04.005

[22] Robazza, C., and Bortoli, L. Perceived impact of anger and anxiety on performance in rugby players. Psychology of Sport and Exercise, 2007;8,875-890. DOI:10.1016/j.psychsport.2006.07.005

[23] Cox, R., Shannon, J., McGuire, R., and McBride, A. Predicting subjective athletic performance from psychological skills after controlling for sex and sport. *Journal of Sport Behavior*, 2010; 33 (2), 129-145.

[24] Perry, P. Concept Analysis: Confidence/Self-confidence. In: Nursing Forum. Blackwell; 2011. https://doi.org/10.1111/j.1744-6198.2011.00230.x

[25] Bandura, A. Self-efficacy: The exercise of control. New York: W.H. Freeman;1997.

[26] Hays, K., Thomas, O., Maynard, I., and Bawden, M. The role of confidence in world-class sport performance. *Journal of Sports Sciences*, 2009;27(11),1185-1199. http://dx.doi.org/10.1080/02640410903089798

[27] Vealey, R. Understanding and enhancing self-confidence in athletes. In R. Singer, H. Hausenblas, & C. Janelle (Eds.), Handbook of sport psychology. New York: Wiley;2001

[28] Harter, S. The development of competence motivation in the mastery of cognitive and physical skills: Is there still a place for joy? In G.C. Roberts and D.M. Landers (eds.). Psychology of Motor Behavior and Sport. Champaign, Ill.: Human Kinetics Press, 1981; pp. 3-29.

[29] Allender, S., Cowburn, G. and Foster, C. Understanding participation in sport and physical activity among children and adults: A review of

qualitative studies. Journal of Health Education Research: theory and practice. 2006; Vol. 21 (6): 826-835. DOI:10.1093/her/cyl063

[30] Sport England Understanding participation in sport: what determines sports participation among recently retired people? Sport England, London;2006.

[31] Beattie S., Hardy L., and Woodman T. Precompetition Self-Confidence: The Role of the Self. Journal of Sport & Exercise Psychology, 2004, 26, 427-441 Human Kinetics Publishers, Inc. DOI:10.1123/jsep.26.3.427

[32] Feltz, D.L. Self-confidence and Sports Performance. *Journal of Exercise and Sport Science*. 1988; Vol.16:423-457. https://ess220.files.wordpress.com/2008/02/feltz-1988-highlighted.pdf [Accessed June 10, 2021]

[33] Madhushani A. A. L., Jayantha K., and Ubayachandra, E.G. Influence of Past Experience on Sport Participation of University System in Sri Lanka; 2012

[34] Lee, M.J., Whitehead, J. and Balchin, N. The Measurement of Values in Youth Sport: Development of the Youth Sport Values Questionnaire. *Journal of Sport and Exercise Psychology*. 2000; 22. 307-326. DOI:10.1123/jsep.22.4.307

[35] Alfredo Silva, Diogo Monteiro and Pedro Sobreiro Effects of sports participation and the perceived value of elite sport on subjective well-being: Sport in Society, 2019. DOI: 10.1080/17430437.2019.1613376

[36] Wicker, P., Hallmann, K., Breuer, C. Micro and Macro level determinants of sport participation. Sport, Business and Management: An International Journal, 2012; 2(1), 51-68. https://doi.org/10.1108/20426781211207665

[37] Min-Haeng Cho. Preliminary reliability of the five-item physical activity questionnaire. Journal of Physical Therapy science, 2016; 28(12): 3393-3397 https://doi.org/10.1589/jpts.28.3393

[38] Kuloor H. & Kumar A. Self-confidence and sports. *The International Journal of Indian Psychology* Vol. 8, Issue 4, Oct-Dec, 2020. DOI: 10.25215/0804.001

[39] Heydari at al. The effect of Psychological skills training (goal setting, positive self-talk and Imagery) on self-confidence of adolescent volleyball players, pedagogics psychology, medical biological problems of physical training and sports (online) 2018; vol.22(4). DOI: https://doi.org/10.15561/18189172.2018.0404

[40] Yan, Z. and Cardinal, B. J. Increasing Asian International College Students' Physical Activity Behavior: A Review of the Youth Physical Activity Promotion Model. Spring 2013, Vol. 45, No. 1. https://files.eric.ed.gov/fulltext/EJ1014997.pdf

[41] Alasinrin, S. Socio-Psychological Factors as Determinants of Sports Participation among Students of Kwara State University Malete, Nigeria [thesis]. Kwara State University, Nigeria; 2020.

[42] Ouyang Yiyi, Wang Kun, Zhang Tingran, Peng Li, Song Gan, Luo Jiong. The Influence of Sports Participation on Body Image, Self-Efficacy, and Self-Esteem in College Students.Frontiers in Psychology; 2020, vol.10 pg. 3039. https://doi.org/10.3389/fpsyg.2019.03039

[43] Thomas, A., Beaudry, K., Gammage, K.L., Klentrou, P. and Josse, A.R. Physical Activity, Sport Participation, and Perceived Barriers to Engagement in First-Year Canadian University Students. Journal of Physical Activity & Health 16(6):1-10. DOI: 10.1123/jpah.2018-0198

[44] Quinton, T. S., and Brunton, J. A. The Key Psychological Beliefs Underlying Student Participation in Recreational Sport. Recreational Sports Journal; 2020, Vol. 44(1) 38-50. https://doi.org/10.1177/155886612093217.

[45] Robert S. Weinberg, Daniel Gould. Foundation of Sport and Exercise Psychology. 7th ed. USA; 2019 pg. 543-548.

[46] Ustun, U. D. Participation Motivation in University Students Who Engage in Different Team Sports. World Journal of Education; 2018, Vol. 8, No. 3 https://files.eric.ed.gov/fulltext/EJ1182575.pdf

[47] Adeyeye, M. Psychological Variables of Sport Participation and Involvement among Student-Athletes of Tertiary Institutions in South-West, Nigeria. International Journal of Sport and Health Sciences. 2015; vol.9, no.11. doi.org/10.5281/zenodo.1109956

[48] Norzaidi, M.D., Akmal, S.I., Nazhatul, A.A., and Fatin, A.M. Relationship Between Sports involvement and students' performance in Malaysian University. International Journal of Undergraduates Studies. 2013; 2(3), 32-39. https://core.ac.uk/download/pdf/85123826.pdf

[49] Kerry, G. Poorer students are less likely to take part in sport at university. 2021 https://theconversation.com/poorer-students-are-less-likely-to-take-part-in-sport-at-university-152865 [Accessed June 30, 2021]

[50] Brunton, J.A. Engaging university students in sport and active recreation. Cultura_Ciencia_Deporte, 2016; 11(32), 85-86.

[51] Nxumalo, S.A. and Beetge, R. Sport Participation of Female University Students. South African Journal for Research in Sport, Physical Education and Recreation, 2017, 39(2): 163 – 179

[52] Tan, J. A study of the sport and leisure activities participation among selected college and university students in China. 200 Proceedings of the World Leisure Congress,10th 2008; Quebec City. Poster presentation #107, p. 30. http://benefitshub.ca/entry/a-study-of-the-sport-and-leisure-activities-participation-among-selected-co [Accessed June 30, 2021]

[53] Don J. Webber, D.J., and Mearman, A. Student Participation in Sporting Activities. 2009. https://www2.uwe.ac.uk/faculties/BBS/BUS/Research/economics%202005/0501%20Student%20Participation%20in%20Sporting%20Activities.pdf [Accessed June 30, 2021]

[54] Hashim, H. A. Perceived Barriers to Recreation Sport Participation in University Students: A Comparison between International and Local Students in the United States. Pertanika J. Soc. Sci. & Hum; 2012, 20 (1): 197 – 203

[55] Sport England. Higher Education Sport Participation and Satisfaction Survey. National Report Year Three. 2014. https://sportengland-production-files.s3.eu-west-2.amazonaws.com/s3fs-public/he-sport-survey-national-summary-year-3.pdf [Accessed June 30, 2021]